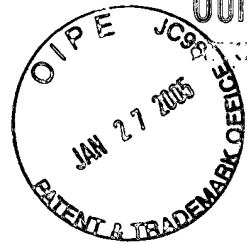




ATTORNEYS AT LAW



Robert Greene Sterne  
Edward J. Kessler  
Jorge A. Goldstein  
David K.S. Cornwell  
Robert W. Esmond  
Troy-Gene G. Dinkin  
Michelle A. Cambala  
Michael B. Raley  
Robert E. Schacht  
Eric K. Stoff  
Michael Q. Lee  
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Matthew E. Kelly  
Nicole R. Kramer  
  
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Matthew J. David  
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January 27, 2005

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Re: U.S. Utility Patent Application  
Appl. No. 10/801,951; Filed: March 17, 2004  
For: **Facially Amphiphilic Polymers and Oligomers and Uses Thereof**  
Inventors: DeGRADO *et al.*  
Our Ref: 1694.0630003/JMC/AES

Sir:

Applicants submit the following documents for appropriate action by the U.S. Patent and Trademark Office:

1. Information Disclosure Statement;
2. Two (2) pages of Form PTO/SB/08A and eight (8) pages of Form PTO/SB/08B citing ninety-three (93) documents;
3. Copies of seventy-seven (77) cited documents; and
4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. If extensions of time under 37 C.F.R. § 1.136 other than those otherwise provided for herewith are required to prevent

Commissioner for Patents  
January 27, 2005  
Page 2

abandonment of the present patent application, then such extensions of time are hereby petitioned, and any fees therefor are hereby authorized to be charged to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Ann E. Summerfield  
Attorney for Applicants  
Registration No. 47,982

AES/law  
Enclosures

358055v1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

DeGrado *et al.*

Appl. No.: 10/801,951

Filed: March 17, 2004

For: **Facially Amphiphilic Polymers  
and Oligomers and Uses Thereof**

Confirmation No.: 2895

Art Unit: 1615

Examiner: *To be assigned*

Atty. Docket: 1694.0630003/JMC/AES

**Information Disclosure Statement**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450  
Sir:

Listed on accompanying Forms PTO/SB/08A (2 pages) and PTO/SB/08B (8 pages) are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Copies of documents **AA1-AO1** are not provided in accordance with the Changes To Support Implementation of the United States Patent and Trademark Office 21st Century Strategic Plan, effective October 21, 2004, which states "section 1.98(a)(2)(i) is amended to eliminate the requirement in paragraph (a)(2)(i) for a copy of each U.S. patent or U.S. patent application publication listed in an IDS in a patent application regardless of the filing date of the application."

A copy of document **BA8** is not provided in accordance with the U.S. Patent and Trademark Office OG notice of October 19, 2004, which states: "the requirement in 37 C.F.R. § 1.98(a)(2)(iii) for a legible copy of the specification, including the claims, and drawings of each cited pending U.S. patent application (or portion of the application which caused it to be listed) is *sua sponte* waived where the cited pending application is stored in the USPTO's IFW system."

A copy of each other document is provided.

The Examiner's attention is directed to the following co-pending U.S. Patent Applications, which are directed to related technical subject matter:

U.S. Patent Application No. 10/459,698, Lopez *et al.*, filed June 12, 2003, now U.S. Patent Application Publication No. 2004/0102941, cited herewith as document **AL1**;

U.S. Patent Application No. 10/ 446,171, Doerksen *et al.*, filed May 28, 2003, now U.S. Patent Application Publication No. 2004/0107056, cited herewith as document **AM1**;

U.S. Patent Application No. 10/471,028, DeGrado *et al.*, filed September 8, 2003, now U.S. Patent Application Publication No. 2004/0185257, cited herewith as document **AN1**;

U.S. Patent Application No. 10/471,029, DeGrado *et al.*, filed September 8, 2003, now U.S. Patent Application Publication No. 2004/0202639, cited herewith as document **AO1**; and

U.S. Patent Application entitled "Facially Amphiphilic Polyaryl and Polyarylkynyl Polymers and Oligomers and Uses Thereof," filed January 21, 2005, naming as inventors William F. DeGrado, Dahui Liu, Gregory N. Tew, and Michael L. Klein (Attorney Docket No. 1694.0590001/JMC/AES), cited herewith as document **BA8**.

The identification of these U.S. Patent Applications is not to be construed as a waiver of secrecy as to these applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during examination.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached Forms PTO/SB/08A and PTO/SB/08B based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

DeGrado *et al.*  
Appl. No. 10/801,951

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Forms PTO/SB/08A and PTO/SB/08B, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

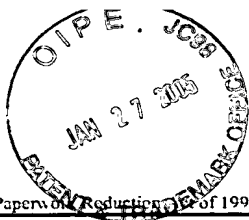
Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Ann E. Summerfield  
Attorney for Applicants  
Registration No. 47,982

Date: January 27, 2005  
1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
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|   |   |    |   | Application Number       | 10/801,951           |
|   |   |    |   | Filing Date              | March 17, 2004       |
|   |   |    |   | First Named Inventor     | William F. DeGrado   |
|   |   |    |   | Art Unit                 | 1615                 |
|   |   |    |   | Examiner Name            | To be assigned       |
| Sheet   | 1 | of | 2 | Attorney Docket Number   | 1694.0630003/JMC/AES |

| U.S. PATENT DOCUMENTS |                       |  |                                |  |   |
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|                       |                       | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       | AA1                   | 3,829,563                                | 08/13/1974                     | Barry <i>et al.</i>                                |   |
|                       | AB1                   | 4,343,788                                | 08/10/1982                     | Mustacich <i>et al.</i>                            |   |
|                       | AC1                   | 4,392,848                                | 07/12/1983                     | Lucas <i>et al.</i>                                |   |
|                       | AD1                   | 5,071,648                                | 12/10/1991                     | Rosenblatt   |   |
|                       | AE1                   | 5,847,047                                | 12/08/1998                     | Haynie   |   |
|                       | AF1                   | 5,856,245                                | 01/05/1999                     | Caldwell <i>et al.</i>                             |   |
|                       | AG1                   | 5,874,164                                | 02/23/1999                     | Caldwell   |   |
|                       | AH1                   | 5,912,116                                | 06/15/1999                     | Caldwell   |   |
|                       | AI1                   | 6,034,129                                | 03/07/2000                     | Mandeville III <i>et al.</i>                       |   |
|                       | AJ1                   | 6,040,251                                | 03/21/2000                     | Caldwell   |   |
|                       | AK1                   | 6,083,602                                | 07/04/2000                     | Caldwell <i>et al.</i>                             |   |
|                       | AL1                   | 2004/0102941                             | 05/27/2004                     | Lopez <i>et al.</i>                                |   |
|                       | AM1                   | 2004/0107056                             | 06/03/2004                     | Doerksen <i>et al.</i>                             |   |
|                       | AN1                   | 2004/0185257                             | 09/23/2004                     | DeGrado <i>et al.</i>                              |   |
|                       | AO1                   | 2004/0202639                             | 10/14/2004                     | DeGrado <i>et al.</i>                              |   |
|                       | AP                    |  |                                |  |   |
|                       | AQ                    |  |                                |  |   |
|                       | AR                    |  |                                |  |   |
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| FOREIGN PATENT DOCUMENTS |                       |  |                                |  |  |                |
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|                          |                       | Country Code <sup>3</sup> Number <sup>4</sup><br>Kind Code <sup>5</sup> (if known) |                                |  |  |                |
|                          | AT1                   | WO 90/04401  | 05/03/1990                     | Lehigh University                                  |  |                |
|                          | AU1                   | WO 95/00547  | 01/05/1995                     | E.I. DuPont De Nemours & Co.                       |  |                |
|                          | AV1                   | WO 97/29160  | 08/14/1997                     | Surface Solutions Labs., Inc.                      |  |                |
|                          | AW1                   | WO 97/49413  | 12/31/1997                     | Geltex Pharmaceuticals, Inc.                       |  |                |
|                          | AX1                   | WO 02/072007   | 09/19/2002                     | The Univ. of Pennsylvania                          |  |                |
|                          | AY1                   | WO 02/100295   | 12/19/2002                     | The Univ. of Pennsylvania                          |  |                |

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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|  |   |    |   | Application Number       | 10/801,951           |
|  |   |    |   | Filing Date              | March 17, 2004       |
|  |   |    |   | First Named Inventor     | William F. DeGrado   |
|  |   |    |   | Art Unit                 | 1615                 |
|  |   |    |   | Examiner Name            | To be assigned       |
| Sheet  | 2 | of | 2 | Attorney Docket Number   | 1694.0630003/JMC/AES |

| U.S. PATENT DOCUMENTS |                       |  |                                |  |   |
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|                       | AA                    |  |                                |  |   |
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|                       | AQ                    |  |                                |  |   |
|                       | AR                    |  |                                |  |   |
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|                          | AT2                   | WO 04/082634   | 09/30/2004                     | DeGrado <i>et al.</i>                              |   |                |
|                          | AU                    |  |                                |  |   |                |
|                          | AV                    |  |                                |  |   |                |
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|  |   |    |   | Art Unit                 | 1615                 |
|  |   |    |   | Examiner Name            | To be assigned       |
| Sheet  | 1 | of | 8 | Attorney Docket Number   | 1694.0630003/JMC/AES |

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|---------------------------------|-----------------------|--|----------------|
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|                                 | BA1                   | Andersen, J.H., <i>et al.</i> , "Lactoferrin and cyclic lactoferricin inhibit the entry of human cytomegalovirus into human fibroblasts," <i>Antiviral Res.</i> 51:141-149, Elsevier (2001)  |                |
|                                 | BB1                   | Barany, G., <i>et al.</i> , "Solid-phase peptide synthesis: a silver anniversary report," <i>Int. J. Pept. Protein Res.</i> 30:705-739, Munksgaard International Publishers (1987)   |                |
|                                 | BC1                   | Barron, A.E., and Zuckerman, R.N., "Bioinspired polymeric materials: in-between proteins and plastics," <i>Curr. Opin. Chem. Biol.</i> 3:681-687, Current Biology Ltd. (1999)  |                |
|                                 | BD1                   | Bastian, A., and Schäfer, H., "Human $\alpha$ -defensin 1 (HNP-1) inhibits adenoviral infection in vitro," <i>Regul. Pept.</i> 101:157-161, Elsevier (2001)  |                |
|                                 | BE1                   | Belaid, A., <i>et al.</i> , "In Vitro Antiviral Activity of Dermaseptins Against Herpes Simplex Virus Type 1," <i>J. Med. Virol.</i> 66:229-234, Wiley-Liss (February 2002)  |                |
|                                 | BF1                   | Bjørnholm, T., <i>et al.</i> , "Self-Assembly of Regioregular, Amphiphilic Polythiophenes into Highly Ordered $\pi$ -Stacked Conjugated Polymer Thin Films and Nanocircuits," <i>J. Am. Chem. Soc.</i> 120:7643-7644, American Chemical Society (1998) |                |
|                                 | BG1                   | Boman, H.G., "Innate immunity and the normal microflora," <i>Immunol. Rev.</i> 173:5-16, Munksgaard International Publishers (2000)  |                |
|                                 | BH1                   | Boman, H.G., <i>et al.</i> , "Cell-free immunity in Cecropia. A model system for antibacterial proteins," <i>Eur. J. Biochem.</i> 201:23-31, Blackwell Science Ltd. (1991)   |                |
|                                 | BI1                   | Bradley, J.S., and Scheld, W.M., "The Challenge of Penicillin-Resistant <i>Streptococcus pneumoniae</i> Meningitis: Current Antibiotic Therapy in the 1990s," <i>Clin. Infect. Dis.</i> 24 (Suppl. 2):S213-221, University of Chicago Press (1997)     |                |
|                                 | BJ1                   | Broekaert, W.F., <i>et al.</i> , "An automated quantitative assay for fungal growth inhibition," <i>FEMS Microbiol. Lett.</i> 69:55-60, Elsevier (1990)  |                |

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.93. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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|  |                |    |   | Art Unit                 | 1615                 |  |
| Examiner Name  | To be assigned |    |   |                          |                      |  |
| Sheet  | 2              | of | 8 | Attorney Docket Number   | 1694.0630003/JMC/AES |  |

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|                                 | BA2                   | Butler, J.C., <i>et al.</i> , "The Continued Emergence of Drug-Resistant <i>Streptococcus pneumoniae</i> in the United States: An Update from the Centers for Disease Control and Prevention's Pneumococcal Sentinel Surveillance System," <i>J. Infect. Dis.</i> 174:986-993, University of Chicago Press (1996) |                |
|                                 | BB2                   | Chen, J., <i>et al.</i> , "Development of Protegrins for the Treatment and Prevention of Oral Mucositis: Structure-Activity Relationships of Synthetic Protegrin Analogues," <i>Biopolymers</i> 55:88-98, Wiley Interscience (2000)   |                |
|                                 | BC2                   | Cole, A.M., <i>et al.</i> , "Retrocyclin: A primate peptide that protects cells from infection by T- and M-tropic strains of HIV-1," <i>Proc. Natl. Acad. Sci USA</i> 99:1813-1818, National Academy of Sciences (February 2002)  |                |
|                                 | BD2                   | Debono, M., and Gordee, R.S., "Antibiotics that Inhibit Fungal Cell Wall Development," <i>Annu. Rev. Microbiol.</i> 48:471-497, Annual Reviews (1994)   |                |
|                                 | BE2                   | DeGrado, W.F., "Design of Peptides and Proteins," in <i>Advances in Protein Chemistry, Volume 39</i> , Anfinsen, C.B., <i>et al.</i> , eds., Academic Press, Inc., San Diego, CA, pp. 51-124 (1988)   |                |
|                                 | BF2                   | DeGrado, W.F., <i>et al.</i> , "Design, Synthesis, and Characterization of a Cytotoxic Peptide with Melittin-Like Activity," <i>J. Amer. Chem. Soc.</i> 103:679-681, American Chemical Society (1981)   |                |
|                                 | BG2                   | DeGrado, W.F., <i>et al.</i> , "Kinetics and Mechanism of Hemolysis Induced by Melittin and by a Synthetic Melittin Analogue," <i>Biophys. J.</i> 37:329-338, Rockefeller University Press (1982)   |                |
|                                 | BH2                   | DeLucca, A.J., and Walsh, T.J., "Antifungal Peptides: Novel Therapeutic Compounds against Emerging Pathogens," <i>Antimicrob. Agents Chemother.</i> 43:1-11, American Society for Microbiology (1999)   |                |
|                                 | BI2                   | Dempsey, C.E., "The actions of melittin on membranes," <i>Biochim. Biophys. Acta</i> 1031:143-161, Elsevier (1990)  |                |
|                                 | BJ2                   | Diness, V., and Østergaard, P.B., "Neutralization of a Low Molecular Weight Heparin (LHN-1) and Conventional Heparin by Protamine Sulfate in Rats," <i>Thromb. Haemost.</i> 56:318-322, Schattauer (1986)   |                |

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|  |                |    |   | Application Number       | 10/801,951           |
|  |                |    |   | Filing Date              | March 17, 2004       |
|  |                |    |   | First Named Inventor     | William F. DeGrado   |
|  |                |    |   | Art Unit                 | 1615                 |
| Examiner Name  | To be assigned |    |   |                          |                      |
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|                                 | BA3                   | Edwards, J.R., <i>et al.</i> , "In Vitro Antibacterial Activity of SM-7338, a Carbapenem Antibiotic with Stability to Dehydropeptidase I," <i>Antimicrob. Agents Chemother.</i> 33:215-222, American Society for Microbiology (1989)        |                |
|                                 | BB3                   | Egal, M., <i>et al.</i> , "Antiviral effects of synthetic membrane-active peptides on Herpes Simplex Virus, Type 1," <i>Int. J. Antimicrob. Agents</i> 13:57-60, Elsevier (1999)  |                |
|                                 | BC3                   | Ganz, T., <i>et al.</i> , "Defensins," <i>Eur. J. Haematol.</i> 44:1-8, Munksgaard (1990)   |                |
|                                 | BD3                   | Ganz, T., <i>et al.</i> , "Defensins. Natural Peptide Antibiotics of Human Neutrophils," <i>J. Clin. Invest.</i> 76:1427-1435, American Society for Clinical Investigation (1985)   |                |
|                                 | BE3                   | Gazit, E., <i>et al.</i> , "Interaction of the Mammalian Antibacterial Peptide Cecropin P1 with Phospholipid Vesicles," <i>Biochemistry</i> 34:11479-11488, American Chemical Society (1995)  |                |
|                                 | BF3                   | Gellman, S.H., "Foldamers: A Manifesto," <i>Acc. Chem. Res.</i> 31:173-180, American Chemical Society (1998)  |                |
|                                 | BG3                   | Gennaro, R., and Zanetti, M., "Structural Features and Biological Activities of the Cathelicidin-Derived Antimicrobial Peptides," <i>Biopolymers</i> 55:31-49, Wiley Interscience (2000)  |                |
|                                 | BH3                   | Hamuro, Y., <i>et al.</i> , "De Novo Design of Antibacterial $\beta$ -Peptides," <i>J. Am. Chem. Soc.</i> 121:12200-12201, American Chemical Society (1999)   |                |
|                                 | BI3                   | Hamuro, Y., <i>et al.</i> , "Novel Folding Patterns in a Family of Oligoanthranilamides: Non-Peptide Oligomers That Form Extended Helical Secondary Structures," <i>J. Am. Chem. Soc.</i> 119:10587-10593, American Chemical Society (1997) |                |
|                                 | BJ3                   | Hancock, R.E.W., and Lehrer, R., "Cationic peptides: a new source of antibiotics," <i>Trends Biotechnol.</i> 16:82-88, Elsevier Science Publishers B.V. (1998)  |                |

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|  |   |    |   | Filing Date              | March 17, 2004       |
|  |   |    |   | First Named Inventor     | William F. DeGrado   |
|  |   |    |   | Art Unit                 | 1615                 |
|  |   |    |   | Examiner Name            | To be assigned       |
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|                                 | BA4                   | Haynie, S.L., <i>et al.</i> , "Antimicrobial Activities of Amphiphilic Peptides Covalently Bonded to a Water-Insoluble Resin," <i>Antimicrob. Agents Chemother.</i> 39:301-307, American Society For Microbiology (1995)               |                |
|                                 | BB4                   | Hiramatsu, K., <i>et al.</i> , "Methicillin-resistant <i>Staphylococcus aureus</i> clinical strain with reduced vancomycin susceptibility," <i>J. Antimicrob. Chemother.</i> 40:135-136, Oxford University Press (1997)                |                |
|                                 | BC4                   | Hirsh, J., and Levine, M.N., "Low Molecular Weight Heparin," <i>Blood</i> 79:1-17, American Society of Hematology (1992)   |                |
|                                 | BD4                   | Javadpour, M.M., <i>et al.</i> , "De Novo Antimicrobial Peptides with Low Mammalian Cell Toxicity," <i>J. Med. Chem.</i> 39:3107-3113, American Chemical Society (1996)  |                |
|                                 | BE4                   | Kandrotas, R.J., "Heparin Pharmacokinetics and Pharmacodynamics," <i>Clin. Pharmacokinet.</i> 22:359-374, Adis Intrnational Ltd. (1992)  |                |
|                                 | BF4                   | Landon, C., <i>et al.</i> , "Solution structure of drosomycin, the first inducible antifungal protein from insects," <i>Protein Sci.</i> 6:1878-1884, Cambridge University Press (1997)  |                |
|                                 | BG4                   | Liu, D. <i>et al.</i> , "Nontoxic Membrane-Active Antimicrobial Arylamide Oligomers," <i>Angew. Chem. Int. Ed. Engl.</i> 43:1158-1162, Verlag Chemie (February 2004)   |                |
|                                 | BH4                   | Liu, D., and DeGrado, W.F., "De Novo Design, Synthesis, and Characterization of Antimicrobial $\beta$ -Peptides," <i>J. Amer. Chem. Soc.</i> 123:7553-7559, American Chemical Society (2001)   |                |
|                                 | BI4                   | Lyytikäinen, O., <i>et al.</i> , "Outbreak caused by two multi-resistant <i>Acinetobacter baumannii</i> clones in a burns unit: emergence of resistance to imipenem," <i>J. Hosp. Infect.</i> 31:41-54, W.B. Saunders (1995)           |                |
|                                 | BJ4                   | Maloy, W.L., and Kari, U.P., "Structure-Activity Studies on Magainins and Other Host Defense Peptides," <i>Biopolymers</i> 37:105-122, Wiley (1995)  |                |

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|                                 | BA5                   | Margel, S., <i>et al.</i> , "Peptide, protein, and cellular interactions with self-assembled monolayer model surfaces," <i>J. Biomed. Mater. Res.</i> 27:1463-1476, Wiley Interscience (1993)   |                |
|                                 | BB5                   | Merrifield, E.L., <i>et al.</i> , "D-Enantiomers of 15-residue cecropin A-melittin hybrids," <i>Int. J. Pept. Protein Res.</i> 46:214-220, Munksgaard International Publishers (1995)   |                |
|                                 | BC5                   | Merrifield, R.B., <i>et al.</i> , "Design and synthesis of antimicrobial peptides," <i>Ciba Found. Symp.</i> 186:5-26, Wiley (1994)   |                |
|                                 | BD5                   | Merrifield, R.B., <i>et al.</i> , "Retro and retroenantio analogs of cecropin-melittin hybrids," <i>Proc. Natl. Acad. Sci. USA</i> 92:3449-3453, National Academy of Sciences (1995)  |                |
|                                 | BE5                   | Montecalvo, M.A., <i>et al.</i> , "Outbreak of Vancomycin-, Ampicillin-, and Aminoglycoside-Resistant <i>Enterococcus faecium</i> Bacteremia in an Adult Oncology Unit," <i>Antimicro. Agents Chemother.</i> 38:1363-1367, American Society for Microbiology (1994) |                |
|                                 | BF5                   | Oren, Z., and Shai, Y., "Mode of Action of Linear Amphipathic $\alpha$ -Helical Antimicrobial Peptides," <i>Biopolymers</i> 47:451-463, Wiley Interscience (1998)   |                |
|                                 | BG5                   | Peggion, E., <i>et al.</i> , "Conformation and Interactions of Bioactive Peptides from Insect Venoms: The Bombolitins," <i>Biopolymers</i> 43:419-431, Wiley Interscience (1997)  |                |
|                                 | BH5                   | Porter, E.A., <i>et al.</i> , "Antibiotics: Non-haemolytic $\beta$ -amino-acid oligomers," <i>Nature</i> 404:565, Nature Publishing Group (2000)  |                |
|                                 | BI5                   | Pouny, Y., <i>et al.</i> , "Interaction of Antimicrobial Dermaseptin and Its Fluorescently Labeled Analogs with Phospholipid Membranes," <i>Biochemistry</i> 31:12416-12423, American Chemical Society (1992)   |                |
|                                 | BJ5                   | Samson, N., <i>et al.</i> , "Relationships Between Synthesis and Mechanical Properties of New Polyurea Materials," <i>J. Appl. Polym. Sci.</i> 65:2265-2280, Wiley (1997)   |                |

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|  |                |    |   | First Named Inventor     | William F. DeGrado   |
|  |                |    |   | Art Unit                 | 1615                 |
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|                                 | BA6                   | Sinha, S., <i>et al.</i> , "NP-1, a Rabbit $\alpha$ -Defensin, Prevents the Entry and Intercellular Spread of Herpes Simplex Virus Type 2," <i>Antimicrob. Agents Chemother.</i> 47:494-500, American Society for Microbiology (February 2003) |                |
|                                 | BB6                   | Steiner, H., <i>et al.</i> , "Sequence and specificity of two antibacterial proteins involved in insect immunity," <i>Nature</i> 292:246-248, Nature Publishing Group (1981)   |                |
|                                 | BC6                   | Stigers, K.D., <i>et al.</i> , "Designed molecules that fold to mimic protein secondary structures," <i>Curr. Opin. Chem. Biol.</i> 3:714-723, Current Biology Ltd. (1999)   |                |
|                                 | BD6                   | Tang, Y-Q., <i>et al.</i> , "A Cyclic Antimicrobial Peptide Produced in Primate Leukocytes by the Ligation of Two Truncated $\alpha$ -Defensins," <i>Science</i> 286:498-502, American Association for the Advancement of Science (1999)       |                |
|                                 | BE6                   | Tew, G.N., <i>et al.</i> , "De novo design of biomimetic antimicrobial polymers," <i>Proc. Natl. Acad. Sci. USA</i> 99:5110-5114, National Academy of Sciences (April 2002)  |                |
|                                 | BF6                   | Threlfall, E.J., <i>et al.</i> , "Increasing spectrum of resistance in multiresistant <i>Salmonella typhimurium</i> ," <i>Lancet</i> 347:1053-1054, Lancet Publishing Group (1996)   |                |
|                                 | BG6                   | Tiller, J.C., <i>et al.</i> , "Designing surfaces that kill bacteria on contact," <i>Proc. Natl. Acad. Sci. USA</i> 98:5981-5985, National Academy of Sciences (2001)  |                |
|                                 | BH6                   | Tossi, A., <i>et al.</i> , "Amphipathic, $\alpha$ -Helical Antimicrobial Peptides," <i>Biopolymers</i> 55:4-30, Wiley Interscience (2000)  |                |
|                                 | BI6                   | Turpie, A.G.G., "Pharmacology of the low-molecular-weight heparins," <i>Am. Heart J.</i> 135:S329-S335, Mosby (1998)   |                |
|                                 | BJ6                   | Van Ryn-McKenna, J., <i>et al.</i> , "Neutralization of Enoxaparine-Induced Bleeding by Protamine Sulfate," <i>Thromb. Haemost.</i> 63:271-274, Schattauer (1990)  |                |

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|                                 | BA7                   | Wachinger, M., <i>et al.</i> , "Antimicrobial peptides melittin and cecropin inhibit replication of human immunodeficiency virus 1 by suppressing viral gene expression," <i>J. Gen. Virol.</i> 79:731-740, Cambridge University Press (1998)                |                |
|                                 | BB7                   | Wakefield, T.W., <i>et al.</i> , "A [+18RGD] Protamine Variant for Nontoxic and Effective Reversal of Conventional Heparin and Low-Molecular-Weight Heparin Anticoagulation," <i>J. Surg. Res.</i> 63:280-286, Academic Press (1996)                         |                |
|                                 | BC7                   | Wong, P.C., <i>et al.</i> , "Nonpeptide Factor Xa Inhibitors: I. Studies with SF303 and SK549, a New Class of Potent Antithrombotics," <i>J. Pharmacol. Exp. Therap.</i> 292:351-357, American Society for Pharmacology and Experimental Therapeutics (2000) |                |
|                                 | BD7                   | Woo, G.L.Y., <i>et al.</i> , "Synthesis and characterization of a novel biodegradable antimicrobial polymer," <i>Biomaterials</i> 21:1235-1246, Elsevier (2000)  |                |
|                                 | BE7                   | Yamaguchi, I., <i>et al.</i> , "Synthesis of polyurea rotaxanes using a cyclodextrin complex of $\alpha,\omega$ -diamine," <i>Polym. Bull.</i> 44:247-253, Springer-Verlag (2000)  |                |
|                                 | BF7                   | Zasloff, M., "Antibiotic peptides as mediators of innate immunity," <i>Curr. Opin. Immunol.</i> 4:3-7, Current Biology Ltd. (1992)   |                |
|                                 | BG7                   | Zasloff, M., "Antimicrobial peptides of multicellular organisms," <i>Nature</i> 415:389-395, Nature Publishing Group (January 2002)  |                |
|                                 | BH7                   | Zasloff, M., "Reconstructing one of nature's designs," <i>Trends Pharmacol. Sci.</i> 21:236-238, Elsevier (2000)   |                |
|                                 | BI7                   | Zhang, L., <i>et al.</i> , "Contribution of Human $\alpha$ -Defensin 1, 2, and 3 to the Anti-HIV-1 Activity of CD8 Antiviral Factor," <i>Science</i> 298:995-1000, American Association for the Advancement of Science (November 2002)                       |                |
|                                 | BJ7                   | Zhao, C., <i>et al.</i> , "Identification of a new member of the protegrin family by cDNA cloning," <i>FEBS Lett.</i> 346:285-288, Elsevier (1994)   |                |

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|  |   |    |   | Application Number       | 10/801,951           |
|  |   |    |   | Filing Date              | March 17, 2004       |
|  |   |    |   | First Named Inventor     | William F. DeGrado   |
|  |   |    |   | Art Unit                 | 1615                 |
|  |   |    |   | Examiner Name            | To be assigned       |
| Sheet  | 8 | of | 8 | Attorney Docket Number   | 1694.0630003/JMC/AES |

| NON PATENT LITERATURE DOCUMENTS |                       |  |                |
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| Examiner Initials*              | Cite No. <sup>1</sup> | Include name of the author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published, etc.   | T <sup>2</sup> |
|                                 | BA8                   | U.S. Patent Application entitled "Facially Amphiphilic Polyaryl and Polyaryllalkynyl Polymers and Oligomers and Uses Thereof," filed January 21, 2005, naming as inventors William F. DeGrado, Dahui Liu, Gregory N. Tew, and Michael L. Klein, (Attorney Docket No. 1694.0590001/JMC/AES) |                |
|                                 | BB                    |  |                |
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